



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,668	04/13/2004	Ko Kimura	045054-0159	2870
22428	7590	01/11/2008	EXAMINER	
FOLEY AND LARDNER LLP			HALIYUR, VENKATESH N	
SUITE 500			ART UNIT	PAPER NUMBER
3000 K STREET NW			2619	
WASHINGTON, DC 20007			MAIL DATE	DELIVERY MODE
			01/11/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/822,668	KIMURA ET AL.	
	Examiner	Art Unit	
	Venkatesh Haliyur	2619	

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 13 April 2004.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-27 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) Claim(s) _____ is/are allowed.
6) Claim(s) 1-27 is/are rejected.
7) Claim(s) _____ is/are objected to.
8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
4) Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) Notice of Informal Patent Application
6) Other: _____.

DETAILED ACTION

1. Claims 1-27 is pending in the application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-8, 10-17, 19-26 are rejected under 35 U.S.C. 102 (e) as being anticipated by Burwell et al [US Pat: 5,818,842].

Regarding claim 1, Burwell et al in their invention of "Transparent Interconnector of LANs by an ATM Network" disclosed an ATM (Asynchronous Transfer Mode) bridge device (**item 6 of Fig 1**) to which an ATM network (**items 1a-1c of Fig 1**) and a layer 2 network (**items 9-11,14 of Fig 1**) are connected (**col 4, lines 22-38**), comprising: a first learning unit (**server, item 4 of Fig 4**) item to learn a transmitter address of a packet input from said ATM network and information about a transmission path through which said packet had been transmitted and to judge a destination of said packet based on a result from the

learning (**col 4, lines 49-61**), a second learning unit (**ridge, item 6 of Fig 1**) to learn a transmitter address of a packet input from said ATM network and information about a transmission path to which said packet is to be output (**col 7, lines 29-34**); and a packet scrapping judging unit to compare said transmitter address of said packet input from said ATM network and information about said transmission path through which said packet had been transmitted with said transmitter address of said packet learnt by said second learning unit and information about said transmission path to which said packet is to be output (**ridge packet filtering, item 6 of Fig 1, col 8, lines 15-24**) and, if said transmitter address of said packet input from said ATM network and information about said transmission path through which said packet had been transmitted are matched with said transmitter address of said packet learnt by said second learning unit and information about said transmission path to which said packet is to be output, to scrap said packet (**col 8, lines 25-31**).

Regarding claim 10, Burwell et al disclosed a loop detecting method for detecting loop formed in an ATM bridge device (**item 6 of Fig 1/FIG14, col 6, lines 45-54**) to which an ATM network (**items 1a-1c of Fig 1**) and a layer 2 network (**items 9-11,14 of Fig 1**) are connected (**col 4, lines 22-38**), comprising: a first learning step (**server, item 4 of Fig 4**) item to learn a transmitter address of a packet input from said ATM network and information about a transmission path through which said packet had been transmitted and to judge a destination of said packet based on a result from the learning (**col 4, lines 49-61**), a second

learning step (**ridge, item 6 of Fig 1**) to learn a transmitter address of a packet input from said ATM network and information about a transmission path to which said packet is to be output (**col 7, lines 29-34**); and a packet scrapping judging step to compare said transmitter address of said packet input from said ATM network and information about said transmission path through which said packet had been transmitted with said transmitter address of said packet learnt by said second learning step and information about said transmission path to which said packet is to be output (**ridge packet filtering, item 6 of Fig 1, col 8, lines 15-24**) and, if said transmitter address of said packet input from said ATM network and information about said transmission path through which said packet had been transmitted are matched with said transmitter address of said packet learnt by said second learning step and information about said transmission path to which said packet is to be output, to scrap said packet (**col 8, lines 25-31**).

Regarding claim 19, Burwell et al disclosed an ATM (Asynchronous Transfer Mode) bridge device (**item 6 of Fig 1**) to which an ATM network (**items 1a-1c of Fig 1**) and a layer 2 network (**items 9-11,14 of Fig 1**) are connected (**col 4, lines 22-38**), comprising: a first learning means (**server, item 4 of Fig 4**) item to learn a transmitter address of a packet input from said ATM network and information about a transmission path through which said packet had been transmitted and to judge a destination of said packet based on a result from the learning (**col 4, lines 49-61**), a second learning means (**ridge, item 6 of Fig 1**) to learn a transmitter address of a packet input from said ATM network and

information about a transmission path to which said packet is to be output (**col 7, lines 29-34**); and a packet scrapping judging means to compare said transmitter address of said packet input from said ATM network and information about said transmission path through which said packet had been transmitted with said transmitter address of said packet learnt by said second learning means and information about said transmission path to which said packet is to be output (**ridge packet filtering, item 6 of Fig 1, col 8, lines 15-24**) and, if said transmitter address of said packet input from said ATM network and information about said transmission path through which said packet had been transmitted are matched with said transmitter address of said packet learnt by said second learning means and information about said transmission path to which said packet is to be output, to scrap said packet (**col 8, lines 25-31**).

Regarding claims 2, 11, 20, Burwell et al disclosed wherein, when a packet is transmitted from a first device on the ATM network side to a second device on said ATM network side, a loop-back transmission mode is set to said packet to be received by said second device (**col 3, lines 11-25, col 6, lines 39-44**).

Regarding claims 3, 12, 21, Burwell et al disclosed wherein, when a packet is transmitted from a first device on the layer 2 network side (**ATM layer on switch side, item 30 of Fig 4, col 3, lines 17-25**) to a second device on said ATM network side, a loop-back transmission mode is set to said packet to be received by said second device on said ATM network side (**col 6, lines 45-54**).

Regarding claims 4, 13, 22, Burwell et al disclosed wherein, when a packet is transmitted by a broadcast method from a first device on said ATM network side to other devices on said ATM network side (**col 3, lines 11-25, col 5, lines 34-37**) a loop-back transmission mode is set to said packet to be received by a second device on said ATM network side (**col 6, lines 45-54**).

Regarding claims 5, 14, 23, Burwell et al disclosed, wherein, when a packet is transmitted by a broadcast method from a first device on said ATM network side to other devices on said ATM network side (**col 3, lines 11-25, col 7, lines 44-50**), a loop-back transmission mode is set to said packet to be received by a second device and a third device on said ATM network side (**col 6, lines 45-54**).

Regarding claims 6, 15, 24, Burwell et al disclosed wherein, when a packet is transmitted by a broadcast method from a first device on said layer 2 network side (**Ethernet side, item 23 of Fig 4, col 3, lines 11-25**) to a device on said ATM network side, a loop-back transmission mode is set to said packet to be received by a second device on said ATM network side (**col 3, lines 17-25, col 9, lines 35-54**).

Regarding claim 7, 16, 25 Burwell et al disclosed The ATM bridge device according to claim 1, wherein, when a packet is transmitted from a first device on said ATM network side to a first device on said layer 2 network side (**Ethernet side, item 23 of Fig 4, col 3, lines 11-25**), a loop route is formed on said layer 2 network side (**col 3, lines 17-25**).

Regarding claims 8, 17, 26, Burwell et al disclosed wherein logical transmission paths (**virtual paths**) to be used for bidirectional connection in said ATM network are different from each other (**col 10, lines 10-12, col 6, lines 32-35**).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 9, 18, 27, are rejected under 35 U.S.C. 103(a) as being unpatentable over Burwell et al [US Pat: 5,818,842] in view of Rodrig et al [US Pat: 6,256,314].

Regarding claims 9, 18, 27, Burwell et al disclosed the ATM bridge device (**item 6 of Fig 1**) that bridges ATM network and LAN (**col 4, lines 22-38**), but fails to disclose a VRRP (Virtual Router Redundancy Protocol) is applied in said ATM network and said layer 2 network. However, Rodrig et al in the invention of "Apparatus and Methods for Routerless Layer 3 Forwarding in a Network" disclosed a redundancy routing mechanism involving a VRRP (Virtual Router Redundancy Protocol) when multiple routers back each other up in a network for the purposes of achieving routing redundancy in the network (**col 8, lines 8-23**). Therefore it would have been obvious for one of ordinary skill in the art at the

time the invention was made to use the method of a redundancy routing mechanism involving a VRRP as taught by Rodrig et al in the system of Burwell et al to include a VRRP (Virtual Router Redundancy Protocol) is applied in said ATM network and said layer 2 network in the ATM bridge device. One is motivated as such in order to use VRRP mechanism in the network to achieve a seamless routing ability in the ATM bridge device in the event of a change in the network topology.

Conclusion

6. Any inquiry concerning this communication or earlier communications should be directed to the attention to Venkatesh Haliyur whose phone number is 571-272-8616. The examiner can normally be reached on Monday-Friday from 9:00AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached @ (571)-272-7884. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (571)-272-2600 or fax to 571-273-8300.
7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR

only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

Venkatesh Haliyur

Patent Examiner

HW
1/4/08



HASSAN KIZOU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600